

AMENDED CLAIMS

1. (Currently Amended) A drilling system for drilling a well bore into an earth formation, comprising:
 - drilling means for drilling a well bore;
 - pumping means for pumping drilling fluid into the well bore during drilling; and
 - a drilling fluid outlet system for retrieving drilling fluid from the well bore, said drilling fluid outlet system comprising a choke means for choking the return flow of retrieved drilling fluid, and alternating means for alternating the flow direction through the choke means.
2. (Original) The drilling system according to claim 1, wherein the drilling fluid outlet system comprises an inlet and an outlet, the choke means comprise a first inlet/outlet connection, a second outlet/inlet connection, and the alternating means connect the inlet alternatingly to the first or second connection and the outlet alternatingly to the second or first connection.
3. (Original) The drilling system according to claim 2, wherein filter means are arranged in the first and second connection of the choke means.
4. (Previously Presented) The drilling system according to claim 1, wherein the alternating means comprise a four way valve, having four connections and wherein the connections are connected two by two.
5. (Previously Presented) The drilling system according to claim 1, wherein the drilling fluid outlet system comprises an accumulator.
6. (Previously Presented) The drilling system according to claim 1, wherein the choking means comprise a bi-directional choke.
7. (Previously Presented) The drilling system according to claim 1, wherein the choking means comprise at least two unidirectional chokes.
8. (Canceled)
9. (Currently Amended) A method of drilling a well bore into an earth formation, comprising:

- drilling the well bore by operating drilling means;
- pumping drilling fluid into the well bore during said drilling; and
- retrieving drilling fluid from the well bore in a drilling fluid outlet system, said drilling fluid outlet system comprising a choke means for choking the return flow of retrieved drilling fluid, whereby the flow direction of retrieved drilling fluid through the choke means is alternated for flushing away any debris from the choke means.

10. (New) The method according to claim 9, wherein the drilling fluid outlet system comprises an inlet and an outlet, and the choke means comprises a first inlet/outlet connection and a second inlet/outlet connection, wherein said flow direction of retrieved drilling fluid through the choking means is alternated by alternately connecting the inlet to the first or second connection, and the outlet to the second or first connection.

11. (New) The method according to claim 9, wherein the drilling fluid is filtered using filter means in the drilling fluid outlet system upstream of the choke means.

12. (New) The method according to claim 11, wherein the flow direction through the filter means is altered upon alternating the flow direction through the choking means, for flushing away any debris present on the filter means.